Town of Enfield

Residential Electrical Service Checklist

Address:

OK	NG	N/A	#	Item**	NFPA 70- 2011 NEC*
				General	***2005 Connecticut State Building Code***
			1-	Obtain electrical permits and utility approval	2003 IBC 105.0 or 2009 IRC R105.0
				Service Drop	
			2-	Minimum conductor sizes (AWG).	310.15(B)(7)
				100 Amp. #4 copper or #2 aluminum	*Table 310.15(B)(7)*
				200 Amp. #2/0 copper or #4/0 aluminum	*Table 310.15(B)(7)*
			3-	Minimum open conductor clearance from doors or windows is 3 feet	230.9
				Unless above a window	*Exception*
			4-	Minimum roof clearance is 8 feet	230.24(A)
				Reduction to 3 feet allowed for roof pitches ≥ 4:12	*Exception 2*
				Reduction to 18 inches above overhangs (≤ 6 feet horiz. above overhang)	*Exception 3*
			5-	Minimum vertical ground clearance	230.24(B)
				10 feet from grade or sidewalks to lowest point of drip loop	230.24(B)(1)
				12 feet from grade over residential driveways	230.24(B)(2)
			6-	Protect service entrance cables near driveways or where subject to damage	230.50
			7-	Cable wall support within 12 inches of terminations & not over 30 inch intervals	230.51(A)
			8-	Aluminum connections require anti-oxidant	110.3(B)
			9-	Service head listed for wet locations required	230.54
			10-	Locate weatherhead or gooseneck above service-drop attach point	230.54(C)
				Where impracticable, locate within 24 inches of attach point	*Exception*
			11-	Formed drip loops and connections located below service head	230.54(F)
				Grounding and Bonding	
			12-	Minimum grounding electrode conductor size (AWG)	250.66
				100 Amp - #6 unprotected or #8 copper in raceway or armor 250.64(B)	*Table 250.66*
				200 Amp - #4 copper to water pipe and #6 copper to ground rods	*Table 250.66*
				Aluminum conductors not allowed in contact with masonry or earth	250.64(A)
			13-	Securely fasten and protect grounding electrode conductor from physical damage	250.64(B)
			14-	Grounding electrode conductor attached within 5 feet of water pipe building entrance	250.68(C)
			15-	Clean electrodes at the clamp connector to make a permanent, effective path	250.68(B)
			16-	Two 8 foot long ground rods at 6 feet minimum separation (1 rod if ≤ 25 ohms)	250.53
				Eight feet of rod in ground contact, upper end flush with or below ground	250.53(G)
			17-	Ground rod clamps suitable for direct burial & connect only one conductor	250.70
			18-	All grounding electrode conductors must be brought to the service disconnect	250.24(C)
			19-	No grounding connections on the load side of service disconecting means	250.24(A)(5)
			20-	Main bonding jumper (strap or green screw) to service disconnect enclosure	250.28
			21-	Bond both ends of metal raceways containing grounding electrode conductors	250.64(E)
			22-	Bonding jumper required across water meters and insulated joints	250.68(B)
				Service Panel	
			23-	Workspace in front of panel 30w x 36d x 78h except replacement of existing panels	110.26
			24-	Illumination of indoor working spaces about service equipment and panelboards	110.26(D)
			25-	Service disconnect limited to six switches or breakers at one location	230.71(A)
			26-	Service disconnect outside or inside at nearest point of entry of service conductors	230.70(A)
			27-	Service disconnect permanently marked to identify it as a service disconnect	230.70(B)
			28-	Circuit breakers or fuses identified on a circuit directory by the loads they supply	408.4
			29-	Fuse or circuit-breaker panels prohibited in clothes closets or bathrooms	240.24(D)&(E)
			30-	Circuit breakers are compatible with the panel as listed on the panel door	110.3(B)
			31-	Unused openings in panels, raceways or boxes shall be properly closed 408.7 &	110.12(A)

Comments:

Building Official: Date:

**The equivalent provisions of the 2009 International Residential Code, Chapter 36 may be used in place of NFPA 70.*

***This checklist does not include every code requirement, but most common issues.*

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